

Appl. No. 10/042,822
Amdt. dated April 8, 2005
Reply to Office Action of January 11, 2005

Remarks

Claims 36, 37 and 40-48 are pending in the instant application. In the Office Action mailed January 11, 2005, the Examiner rejects claims 36, 37 and 40-48. Based on the amendments and remarks made herein, Applicants respectfully request that the rejections be withdrawn and that the application be passed to allowance.

1. Paragraphs 1 & 2 of the Office Action Mailed January 11, 2005: Objection to Specification and Rejection of claims 36, 37 and 40-48 under 35 U.S.C. §112, first paragraph.

In the Office Action mailed January 11, 2005, the Examiner objects to the specification under 37 CFR 1.71 because the specification fails to adequately teach how to make and/or use the invention. The Examiner believes that Applicants have "claimed a number of test results that the article exhibit". The Examiner also believes that the Applicants have not disclosed one example of a combination of materials and structure that allow the claimed results to occur. The Examiner believes that the Applicants have not disclosed a best mode. Additionally, the Examiner believes that making an invention consistent with the claims would involve undue experimentation and that Applicants have not given any guidance on how to make a web having the claimed results. Further, the Examiner believes that claim 46 requires "proper application" of hydrophobic material to the basesheet and that the "proper application" needed to meet the claimed rewet value is not described.

The Examiner also rejects claims 36, 37 and 40-48 under 35 U.S.C. §112, first paragraph, because the best mode contemplated by the Applicants has not been disclosed. The Examiner believes that the evidence of concealment of the best mode is based upon there not being an example provided in the specification of the structure and materials used that would provide the article with the claimed test results.

Applicants respectfully traverse the objection to the specification and the rejection of claims 36, 37 and 40-48 under 35 U.S.C. §112, first paragraph. Claim 36 (the only independent claim pending) relates to a method for producing an absorbent web having a dry feel when wet. The method includes a step of preparing an inherently hydrophilic basesheet including papermaking fibers and having an upper surface and a lower surface. The upper surface has elevated and depressed regions. The method also includes the step of depositing hydrophobic matter preferentially on the elevated regions of the upper surface of the basesheet. The basesheet has a Wet Compressed Bulk of about 5 cc/g or greater. This method is adequately taught by the

Appl. No. 10/042,822
Amdt. dated April 8, 2005
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Specification as filed. An exemplary method of producing a tissue basesheet is described as "Example 2" in the Specification at page 53, line 16 to page 55, line 9. The tissue basesheet is a "single-layer, single-ply tissue was made from unrefined northern softwood bleached chemithermomechanical pulp (BCTMP) fibers" (page 53, lines 19-20) which is an example of an "inherently hydrophilic basesheet including papermaking fibers having an upper surface and a lower surface". The web of Example 2 is transferred to a throughdrying fabric (Lindsay Wire T116-3) (page 53, lines 29-30); the "T-116-3 fabric is well suited for creating molded, three-dimensional structures" (page 52, lines 3-4). Thus, this is an example of a basesheet where the "upper surface has elevated and depressed regions". The basesheet of Example 2 is treated with paraffin wax (page 54, lines 7-8); this is an example of "depositing hydrophobic matter preferentially on the elevated regions of the upper surface" of a basesheet. The basesheet of Example 2 had a Wet Compressed Bulk value of 9.65 cc/g (page 54, lines 4-6); this is an example of a basesheet having a "Wet Compressed Bulk of about 5 cc/g or greater". Thus, the Examiner's assertion that the Specification does not contain an example "of the structure and materials used that would provide the article with the claimed test results" is false. Further, the Specification as filed discloses the best mode contemplated by the Applicants. Applicants respectfully request that the Examiner's objection to the Specification and rejection of claims 36, 37 and 40-48 under 35 U.S.C. §112, first paragraph be withdrawn.

In the Office Action mailed January 11, 2005, the Examiner expresses her belief that the phrase "proper application" appears in pending claim 46. Applicants are unable to locate this phrase in pending claim 46 and therefore have not responded to the Examiner's argument in this regard.

2. Paragraph 4 of the Office Action Mailed January 11, 2005: Rejection of Claims 36, 37 and 40-48 Under 35 U.S.C. §112, second paragraph.

In the Office Action mailed January 11, 2005, the Examiner rejects claims 36, 37 and 40-48 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicants regard as the invention. With respect to claim 36, the Examiner believes that the term "preferentially" renders the claim indefinite because the Examiner does not know if the Applicants are claiming the hydrophobic matter as being on the elevated regions or if this is just an option. With respect to claims 43 and 47, the Examiner believes the limitation "the 50% material line" lacks antecedent basis.

Applicants amend claim 36 herein to remove the term "preferentially" and to provide that the upper surface of the basesheet has a "surface area" (as referenced in claim 43). Claim 43 is amended herein to reflect the amendment made to claim 36. Applicants amend claim 47 herein to

Appl. No. 10/042,822
Amdt. dated April 8, 2005
Reply to Office Action of January 11, 2005

reflect a first occurrence of the term "50% material line" (and consequently, to correct the antecedent basis issue). The amendments to claims 36, 43 and 47 do not contain any new matter and are fully supported by the Specification as filed. Applicants appreciate the Examiner's careful attention to language of the pending claims. Based on the amendments to the claims made herein, Applicants respectfully request that the present rejection be withdrawn.

3. Paragraph 6 of the Office Action Mailed January 11, 2005: Rejection of Claims 36, 37, 40-42, 44, 45 and 47 Under 35 U.S.C. §102(e)

In the Office Action mailed January 11, 2005, the Examiner rejects claims 36, 37, 40-42, 44, 45 and 47 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5,763,044 issued to Ahr et al. (hereinafter "the Ahr patent"). Applicants respectfully traverse the rejection.

With respect to claim 36, the Examiner believes the Ahr patent discloses a method for producing an absorbent web having a dry feel when wet. The Examiner believes the Ahr patent discloses a step of preparing an inherently hydrophilic basesheet including papermaking fibers where the basesheet has an upper surface and a lower surface. The Examiner also believes the Ahr patent discloses that the upper surface has elevated and depressed regions. Further, the Examiner believes the Ahr patent discloses a step of depositing hydrophobic matter preferentially on the elevated regions of the upper surface of the base sheet. The Examiner believes the claimed test results are arrived at by performing the disclosed test procedures. Additionally, the Examiner believes "the process of performing the tests are part of the method of producing the claimed article" (followed by a quote from In re Thorpe relating to the patentability of "product-by-process" claims).

With respect to claim 37, the Examiner believes U.S. Patent No. 3,881,987 issued to Benz (hereinafter "the Benz patent"), incorporated by reference in the Ahr patent, discloses a method of making an apertured topsheet involving the steps of depositing an aqueous slurry of cellulosic fibers on a foraminous web to produce an embryonic web, molding the web on a three-dimensional substrate and drying the web. With respect to claim 40, the Examiner believes the Ahr patent discloses the basesheet being wetlaid. With respect to claim 41, the Examiner believes the Ahr patent discloses the basesheet being airlaid. With respect to claim 42, the Examiner believes the Ahr patent discloses hydrophobic material including fibrils. With respect to claim 44, the Examiner believes the Ahr patent discloses hydrophobic material including fibrils that extend into the apertures of the basesheet. With respect to claim 45, the Examiner believes the Ahr patent discloses 9-400 apertures per square inch and the Benz patent discloses the height of the apertures being .254-1.01 mm. The Examiner also believes the Ahr patent discloses the subject matter of claim 47.

Appl. No. 10/042,822
Amdt. dated April 8, 2005
Reply to Office Action of January 11, 2005

Claim 36 is directed to a method for producing an absorbent web having a dry feel when wet. The method includes a step of preparing an inherently hydrophilic basesheet including papermaking fibers and having an upper surface and a lower surface. The upper surface has elevated and depressed regions. The method also includes the step of depositing hydrophobic matter preferentially on the elevated regions of the upper surface of the basesheet. The basesheet has a Wet Compressed Bulk of about 5 cc/g or greater. As an initial matter, claim 36 is not a "product-by-process" claim and therefore, the Examiner's citation to In re Thorpe is misplaced.

In order to anticipate, a reference must teach each and every aspect of the claimed invention. The Ahr patent does not disclose a basesheet having a Wet Compressed Bulk of about 5 cc/g or greater. The Examiner seems to be taking the position that the web structures of the Ahr patent "inherently" possess the claimed Wet Compressed Bulk. Applicants disagree. "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." MPEP §2112 IV, citing In re Rjickaert, 9 F.3d 1531, 1534 (Fed. Cir. 1993). In fact, the disclosure of the Ahr patent supports the contrary: the structures of the Ahr patent would not have the claimed Wet Compressed Bulk. As provided in the Abstract, the Ahr patent is directed to webs that are dispersible and flushable. The Ahr patent discloses "temporary" wet strength resins that provide dispersibility during disposal. (See Col. 5, lines 20-32 of the Ahr patent). Those of skill in the art understand that good dispersibility when wet is a feature that is contrary to the desired wet resiliency claimed by the present invention. If a material loses its wet strength a short time after being wetted, it would not have the claimed Wet Compressed Bulk value. Further, the Ahr patent teaches a preferred fiber furnish that includes about 90 percent Eucalyptus fibers. (See Col. 4, lines 34-44 of the Ahr patent). Eucalyptus fibers are known in the art as being short in length and useful for softness and flexibility as opposed to wet resiliency. Therefore, there is no evidence that the web structures of the Ahr patent possess the claimed Wet Compressed Bulk value. Independent claim 36 is patentable over the Ahr patent and Applicants respectfully request that the rejection be withdrawn.

Dependent claims 37, 40-42, 44, 45 and 47 are patentable over the Ahr patent for at least the reasons provided above. Applicants respectfully request that the rejection of these claims be withdrawn. Additionally, with respect to dependent claim 45, Applicants disagree with the Examiner's conclusion that the Benz patent (incorporated by reference in the Ahr patent) discloses a height of apertures corresponding to at least .254 millimeters and therefore a sheet depth of at least .2 millimeters. The Examiner's calculation of apertures 0.25 mm in height is based upon a misunderstanding of the Benz patent. Where the Benz patent discloses apertures having diameters from about 0.015 to about 0.050 inches, and a cross-sectional area from about 0.15 x

Appl. No. 10/042,822
Amdt. dated April 8, 2005
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10^{-3} to 2.0×10^{-3} square inches, essentially the same information is being disclosed. The cross-section is looking at the circle itself in plan view, as seen from above. In other words, the cross-sectional area refers to the area of the circles themselves. A circle with a diameter of 0.050 inches has an area of $3.1416/4 * (0.050)^2 = 1.9 \times 10^{-3}$ square inches, which can be rounded up to 2.0×10^{-3} square inches, the value provided in the Benz patent for the upper limit of the "cross-sectional area" range. (See Col. 9, lines 1-10 of the Benz patent). A circle with a diameter of 0.015 inches has an area of $3.1416/4 * (0.015)^2 = 0.18 \times 10^{-3}$ square inches, which can be rounded down to 0.15×10^{-3} square inches, identical to the lower range value for "cross-sectional area" provided in the Benz patent. (See Col. 9, lines 1-10 of the Benz patent). These "cross-sectional areas" are the areas of circles having the stated diameters and not the area of a cylinder around an aperture (from which a height of the cylindrical area could be back-calculated). The Examiner is attempting to imply that the "cross-sectional area" dimension in the Benz patent and therefore, incorporated in the Ahr patent, could be used to calculate the "characteristic height" value described in dependent claim 45; such is not the case. Further, even if one attempted to use the "cross-sectional area" dimension to calculate "characteristic height", the description of the present invention provides that apertured areas should be excluded when measuring the height of surface topography. (See Page 23, lines 26-29 of the present application as filed). Because "cross-sectional area" can not be used to derive the "characteristic height", the Ahr patent does not disclose each and every aspect of dependent claim 45. For at least these reasons, dependent claims 37, 40-42, 44, 45 and 47 are patentable over the Ahr patent and Applicants respectfully request that the rejection be withdrawn.

4. Paragraph 9 of the Office Action Mailed January 11, 2005: Rejection of Claims 43, 46 and 48 Under 35 U.S.C. §103(a)

In the Office Action mailed January 11, 2005, the Examiner rejects claims 43, 46 and 48 under 35 U.S.C. §103(a) as being unpatentable over the Ahr patent. Applicants respectfully traverse the rejection.

With respect to claims 43 and 46, the Examiner acknowledges that the Ahr patent does not disclose the exact amount of hydrophobic matter attached to the upper surface or the Rewet value. The Examiner believes that it is evident that the Ahr patent has a value for this characteristic. The Examiner believes that the Ahr patent recognizes that the choice of fibril length and fibril density can be varied and that this will affect the Rewet characteristics. The Examiner believes it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the article of the Ahr patent with the claimed amount of synthetic fibers attached to the upper surface and the claimed Rewet value, since discovering an optimum value of a result effective variable involves only routine skill in the art.

Appl. No. 10/042,822
Amdt. dated April 8, 2005
Reply to Office Action of January 11, 2005

With respect to claim 48, the Examiner believes the Ahr patent discloses the basis weight of the base sheet being .058-14.6 g/m². The Examiner acknowledges that the Ahr patent is silent on the basis weight of the hydrophobic matter. The Examiner believes that it is evident that the Ahr patent has a value for this characteristic. The Examiner believes the Ahr patent recognizes that the choice of fibril length and fibril density can be varied and this will affect the Rewet characteristics. Further, the Examiner believes the Ahr patent recognizes the function of the topsheet in terms of Rewet, acquisition and tactile feel is a result effective variable of fibril length and density. The Examiner believes it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the article of the Ahr patent with the claimed basis weight of the hydrophobic matter, since discovering an optimum value of a result effective variable involves only routine skill in the art.

In order to establish a *prima facie* case of obviousness, three basic criteria must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP §2143. The Examiner bears the initial burden of establishing the *prima facie* case. See In re Piasecki, 223 U.S.P.Q. 785,787, 745 F.2d 1468, 1471 (Fed. Cir. 1984). Applicants respectfully submit that the Ahr patent does not teach or suggest all of the limitations of the invention as claimed and that there is no reasonable expectation of success.

Claims 43, 46 and 48 are dependent on independent claim 36 and therefore, are patentable over the Ahr patent for the reasons already provided herein. Additionally, with respect to dependent claim 43, the Examiner does not explain how the Ahr patent discloses "synthetic fibers fixedly attached to the upper surface of said basesheet such that about 50% or less of the surface area of the upper surface is covered with the synthetic fibers". The portion of the Ahr patent cited by the Examiner, Col. 5, lines 59-60, does not teach or suggest this aspect of the present invention. With respect to claim 46, the Examiner acknowledges that the Ahr patent does not disclose the claimed Rewet value of 0.6 g or less. The Ahr patent describes webs that are fluid pervious, dispersible and flushable and therefore the webs of the Ahr patent would not have the claimed Rewet value of 0.6 g or less. (See Abstract of the Ahr patent). Additionally, the tissue furnish for the webs of the Ahr patent includes a temporary wet strength resin that permits the webs to be dispersible and flushable. The Examiner has not provided any reasoning as to why webs that are fluid pervious, dispersible and flushable would have a Rewet value of 0.6 g or less. Therefore, the Ahr patent teaches away from webs having the characteristics of the claimed

Appl. No. 10/042,822
Amdt. dated April 8, 2005
Reply to Office Action of January 11, 2005

methods. For at least these reasons, Applicants respectfully submit that claims 43, 46 and 48 are patentable over the Ahr patent and that the rejection should be withdrawn.

In conclusion, and in view of the remarks set forth above, Applicants respectfully submit that the application and the claims are in condition for allowance and respectfully request favorable consideration and the timely allowance of pending claims 36, 37 and 40-48. If any additional information is required, the Examiner is invited to contact the undersigned at (920) 721-2433.

The Commissioner is hereby authorized to charge any prosecutorial fees (or credit any overpayment) associated with this communication to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875. If a fee is required for an extension of time under 37 C.F.R. 1.136 not accounted for above, such extension is requested and should also be charged to our Deposit Account.

Respectfully submitted,
FUNG-JOU CHEN ET AL.

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CERTIFICATE OF FACSIMILE TRANSMISSION

I, Judy Garot, hereby certify that on April 8, 2005 this document is being sent by facsimile transmission addressed to the Commissioner for Patents, Alexandria, VA via facsimile number (703) 872-9306.

By: Judy Garot
Judy Garot